Claims

1. An amplifier circuit comprising:

a first transistor; and

a biasing circuit including a process compensation circuit the biasing circuit being coupled to a gate of the first transistor.

2. The circuit of claim 1, wherein the process compensation circuit includes a replica device circuit.

3. The circuit of claim 2, wherein the replica device circuit includes a replica transistor that replicates the characteristics of the first transistor.

4. The circuit of claim 3, wherein the replica device circuit further includes a constant current source coupled to the replica transistor.

5. The circuit of claim 4, wherein the replica transistor is connected as a diode.

6. The circuit of claim 1, wherein the process compensation circuit and the first transistor are included in a single integrated circuit.

7. The circuit of claim 1, wherein the biasing circuit further includes a bias control circuit coupled to the gate of the first transistor.

8. The circuit of claim 7, wherein the bias control circuit includes a variable current source coupled to a control circuit.

9. The circuit of claim 8, wherein the control circuit includes a digital to analog converter.

10. The circuit of claim 1, wherein the biasing circuit further includes a temperature compensation circuit coupled to the gate of the first transistor.

11. The circuit of claim 10, wherein the temperature compensation circuit includes a temperature proportional current source.

12. The circuit of claim 10, wherein the temperature compensation circuit and the first transistor are included in a single integrated circuit

13. The circuit of claim 1, wherein the amplifier circuit is included within a transmitter.

14. The circuit of claim 1, wherein amplifier circuit is included within wireless data link transmitter.

15. A method of supplying a process compensated DC bias voltage comprising:

producing the process compensated DC bias voltage in a process compensation circuit; and

applying the process compensated DC bias voltage to a gate of a first transistor, the process compensation circuit and the first transistor being on a single integrated circuit.

16. The method of claim 15, wherein the process compensated DC bias voltage is substantially equal to a threshold voltage of the first transistor.

17. The method of claim 15, further comprising adjusting the process compensated DC bias voltage to select a desired class of operation for the first transistor.

18. The method of claim 17, wherein adjusting the process compensated DC bias voltage includes receiving a control signal.

19. The method of claim 18, wherein the control signal includes a digital control signal.

20. The method of claim 19, wherein receiving the control signal can include converting the digital control signal to an analog signal.

21. The method of claim 15, further comprising adjusting the process compensated DC bias voltage to compensate for a temperature of the integrated circuit.

22. A data link system comprising:

a first transmitter including an amplifier that includes:

a first transistor; and

a biasing circuit including a process compensation circuit the biasing circuit being coupled to a gate of the first transistor wherein the process compensation circuit and the first transistor are included in a single integrated circuit.

23. A power amplifier circuit comprising:

a first transistor; and

a biasing circuit including a process compensation circuit the biasing circuit being coupled to a gate of the first transistor, the biasing circuit including:

a process compensation circuit;

a bias control circuit coupled to the gate of the first transistor; and

a temperature compensation circuit coupled to the gate of the first transistor, wherein the process compensation circuit, the temperature compensation circuit and the first transistor are included in a single integrated circuit.